-43,4

AMENDMENTS TO THE SPECIFICATION

Please amend the Specification as indicated below.

In the Specification, please add Figures 1-4 attached hereto, which are filed in response to the Examiner's requirement for drawings made under 37 CFR 1.81.

At page 1, line 1, please amend the Title as follows:

VIRTUAL DENTAL [[COMPUTER]] GAME

At page 3, line 1, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a drawing which depicts a flowchart of the steps of a representative method for a user to play a game in a computer, in accord with one embodiment of the inventive subject matter.

Figure 2 is a drawing which depicts a flowchart of the steps of a representative method for a user to play a game in a computer, in accord with one embodiment of the inventive subject matter.

Figure 3 is a drawing which depicts a representative virtual three dimensional dental image, in accord with one embodiment of the inventive subject matter.

Figure 4 is a drawing which depicts the following

representative virtual dental tools, in accord with one embodiment of the inventive subject matter: toothbrush, tooth pick, dental floss, and gum massaging aid.

Please replace paragraph 0020 at page 4, line 28 to page 5, line 7 with the following:

[0020] A method for obtaining a dental occlusion map which may also be applied to generate the virtual 3D dental image of the virtual environment of the computer game of the invention is disclosed in PCT Application WO 98/52,493. Briefly, in this PCT application, the distance between opposite regions on opposite teeth of the upper and lower jaws of the mouth are determined and then a correspondence between the determined distance and regions on a mapping surface is being set-up. This PCT application is also incorporated herein by reference. Figure 3 shows a representative virtual 3D dental image as disclosed in PCT Application WO 98/52,493.

Please replace paragraphs 0024-0026 at page 5, line 19 to page 6, line 25 with the following:

[0024] <u>Figure 1 shows</u> <u>In</u> an exemplary, yet not exclusive, game sequence <u>for playing the game in accordance with one embodiment of the inventive subject matter. <u>In step 1</u>, the user <u>may</u> first</u>

selects select brackets and in step 2 places the brackets place them at appropriate positions on the surface of or selected teeth, which may be some or all teeth of one jaw. In most cases, brackets are placed on the buccal teeth's surface. In step 3, As a next step, the user selects may select an arch-wire from a library of such wires. The library may also include wires of different widths, different cross-sectional shapes and different geometries. In step 4, It may optionally also be possible to change the geometry of the selected wire is changed. For example the wire may be made , e.g. make it to follow a torturous path in a vertical and/or a horizontal plane. In step 5 Thereafter , the wire is may be associated with the teeth by , for example, fitting it into the virtual grooves in the brackets placed on the teeth's surface. For example, similar Similarly to a real-life procedure, the wire may first be anchored to brackets fitted on the molar teeth and then to the other brackets (all of course in the virtual environment). The relative reorientation or translocation of the teeth and/or jaws resulting from such a game sequence is computed in step 6 based on predetermined rules for such translocation or reorientation in accordance with the virtual force or movement applied by the wires.

[0025] The final outcome <u>is then</u> may be displayed <u>in step 7</u>.

<u>In step 8, it is determined whether</u> If the outcome, namely the final achieved state, is a perfect or close to a perfect relative

position or orientation of the teeth and/or jaws. If yes, the game goal may be defined as has been achieved and the process terminates. If no the final state is not the desired one, the user is prompted in step 9 to repeat this game sequence. If no, the process terminates. If yes, the process returns to step 2. The user may receive a score based on how close the final result was to a perfect final state.

[0026] Figure 2 shows an exemplary, yet not inclusive game sequence for playing the game in In accordance with another embodiment of the invention, in which the task to be performed by the user is to maintain teeth hygiene. This may involve use of virtual tools, corresponding to such tools used in normal dental hygiene: toothbrush, tooth picks, dental floss flosses, massaging aids, etc. In this embodiment, the game may, for example, have the object of fighting tooth or gum decay, damage or infection which may be caused by carries or other infectious agents. In step 10, the The user is may be presented with a library of tools and has may have to select a tool to treat a certain developing virtual condition, e.g. carries or a gum infection. In step 12 addition, the game <u>rules</u> rule may, for example, determine a certain continuous progress of infection which if not properly "treated" by the user will cause decay of one or more teeth, gum infection, potential bleeding, loss of teeth, etc. In step 13, the The user

may score points depending on his ability to choose the right tools to treat a particular condition or in avoiding a condition from developing. In step 14, it is determined whether the condition of the teeth is satisfactory. If yes, the process terminates. If no, then in step 15, the user is prompted whether he wishes to select another tool. If no, the process terminates. If yes, the process returns to step 10. Here again, the game, in addition to being amusing and providing an insight of the user into his own teeth, may be educational, particularly for children, on teeth oral hygiene methods and on the importance of maintaining oral hygiene.